

**IN THE ABSTRACT:**

Amend the current Abstract as follows:

A control system provided in a hybrid vehicle with a combustion engine for outputting a driving force, an electric motor for generating a force for assisting the output from the engine, depending on driving conditions, a power storage unit for storing electric energy generated by the motor acting as a generator using the output from the engine and electric energy regenerated by the motor when the vehicle decelerates. The control system includes an output assist determination ~~device means~~ for determining, based on a determination threshold value as the standard, whether to assist the output from the engine by the motor, depending on the driving conditions of the vehicle. An air-fuel controller is provided for changing the air-fuel ratio of the mixture, which is to be supplied to the engine, to a condition leaner or richer than the stoichiometric air-fuel ratio. A determination threshold value ~~changer changing means~~ is provided for changing the determination threshold value, depending on whether the air-fuel ratio of the mixture is leaner or richer than the stoichiometric air-fuel ratio. A determination threshold value change prohibiting ~~device means~~ is provided for prohibiting the operation of the determination threshold value changer when the air-fuel controller changes the air-fuel ratio of the mixture from a condition leaner than the stoichiometric air-fuel ratio to a condition richer than the stoichiometric air-fuel ratio.